DATASETTE DOCTOR.

This new product enables you to carry out a FULL PERFORMANCE check your datasette - Commodore or compatible types - full performance is essential for reliable loading of modern 'TURBO LOADERS'.

OPERATING INSTRUCTIONS. -
THE DATASETTE SERVICE CASSETTE HAS THE FOLLOWING PROGRAMS ON IT:-

APPROXIMATE COUNTER READING:	YOUR READINGS	PROGRAM
0 - 25	-	SLOW BAUD RATE ALIGNMENT PROGRAM
26 - 54	-	SLOW BAUD RATE ALIGNMENT SIGNAL
55 - 77	-	FAST BAUD RATE ALIGNMENT PROGRAM
77 - 100	-	FAST BAUD RATE ALIGNMENT SIGNAL
105 -	-	FAST BAUD RATE SAVING TEST.

PLEASE MAKE A NOTE OF YOUR DATASETTE COUNTER READINGS WHICH MAY DIFFER.

1) CLEANING & DEMAGNETISING.

See the instructions on the reverse of the cleaner/demagnetiser card.

2) SLOW BAUD RATE TEST.

a) Insert the program tape & reset the counter.
b) Press SHIFT & RUN/STOP.
c) By about 5 on the counter, 'SLOW BAUD' should be found.
d) By about 25 on the counter, the Alignment program screen should have appeared - please read the on-screen instructions.
e) The background will be a steady green if the alignment is okay. The background will change to red with an audible 'beep' more often & for longer the worse the alignment is.

ADJUSTING THE ALIGNMEMT

IMPORTANT

(1) REMOVE THE SCREWDRIVER AFTER EACH ADJUSTMENT
(2) NEVER TURN THE SCREW MORE THAN 1/4 TURN IN EITHER DIRECTION.

Insert the screwdriver through the access hole near the cassette door and into the adjusting screw (on compatible datarecorders you may have to remove the tape and press PLAY with the cassette door open to gain access). Now turn the screw very slightly in one direction - aim to get the background staying green for as long as possible. Now turn the screw in the opposite direction - again, get the steadiest green background. Finally, turn the screwdriver back until it is midway between the two settings you have just found.

A datasette in excellent condition in perfect alignment should stay green to the end of the test signal (counter =54). If you tap the datasette the colour will change so you can see how easily load errors can arise.

NB If the border stops flashing whilst you are adjusting the alignment, rewind the tape to about 26 and press PLAY.

3) FAST BAUD RATE TEST.

a) Reset the computer, rewind the tape & wind it on to about 50.
b) Press shift & RUN/STOP. 'FAST BAUD' should be found by about 61.
c) Repeat the procedure in section 2 above.

NB. Please note that some datasettes may not give a very steady green background with this test; provided there are only occassional changes to red, then the alignment is okay. If altering the alignment does not result in much, if any, improvement, then this would suggest that the mechanism is worn or of not very good quality.

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4) HIGH SPEED SAVING & LOADING TEST.

a) Reset the computer.
b) Advance the rewound tape to 105 & press shift & RUN/STOP.
c) When the main screen appears, stop the tape & remove the cassette.
d) Insert a new, fully rewound tape of the type you normally use.
e) Press 1, to select the slowest test initially; reset the tape counter.
f) Now press Play & RECORD. The screen will blank whilst the test program is saved and then the border will flash whilst the test signal is being saved. Stop the tape after a say 4 minutes of test signal has been saved and then reset the computer.
g) Fully rewind the tape and press SHIFT & RUN/STOP.
h) The message FOUND SPEED 1 (or 2 or 3 depending upon which one you saved). should appear.
i) The LOADING TEST PROGRAM will now load & when the main screen appears, the background should remain green for most of the time. If it changes to red then this indicates that bad data is being received by the computer. This can arise from several possibilities:-

1) FAULTY OR WORN DATASETTE MECHANISM
2) POOR TAPE QUALITY
3) INTERFERENCE FROM MAINS OR TVs
4) FAULTY DATSETTE ELECTRONICS.

There is not usually anything you can do about causes (1) or (2) except to check that there are no loose screws, that the drive belt is not twisted, & that there are bits of fluff or dirt on the pulleys & belts. It may be worth putting a tiny drop of thin oil (eg "3 in 1" oil) on the various bearings, but be very careful not to get any on the head, capstan, pinch wheel or drive belts. The next section deals with causes 3 & 4.

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5. TESTING FOR INTERFERNCE; TESTING THE DATASETTE ELECTRONICS.

J) STOP THE TAPE.

If the background changes of its own accord then erratic circuitry inside the datasette is probable. Occasional changes are not serious, but continuous changing may account for any tape loading problems you are experiencing in which case, expert attention is required. Alternatively, interference from mains leads & tv sets can also make the backgroung colour change. To test this possibility, try moving the datasette closer & then further away from your Tv or adjacent mains leads.

NOTES.

Please remember that if you alter the alignment, some programs which you saved before altering the alignment may not now reload.

Some decks will load okay but show up in the tests as not saving very well. There is usually nothing you can do about this.

The DATASETTE DOCTOR programs are a severe test for a datasette so do not worry if yours does not pass with flying colours - most do not, but providing nothing serious shows up, you should have few problems. Please also bear in mind that the datasettes were never designed for turbo loaders so some tapes will always be difficult to load and may need several attempts.

We cannot accept any responsibility, nor offer any guarantees that using the Datasette Doctor will improve the performance of your datasette.

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PINWHEEL DEMAGNETIZER

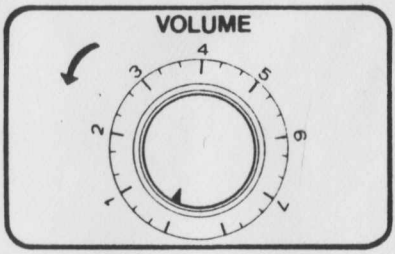
Record/playback heads are magnetized during use in record and playback. Oxide deposits and even minor contamination can have an adverse effect on sound reproduction too. The result of these accumulation affect sound reproduction; increased noise level, reduced high frequency output.

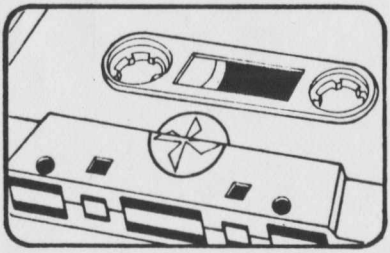
Use the PINWHEEL DEMAGNETIZER after 20 hours playing time to overcome these deficiences.

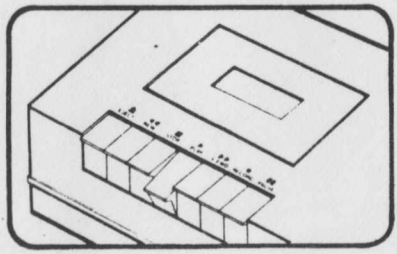
The SPINNING PINWHEEL removes residual magnetic patterns from tape head, while the cleaning tape itself gently cleans the tape shaft and tape head. From the enclosed cleaning solution bottle, place about three drops of solution onto the white cleaning tape through the opening in the front of the cassette. Insert cassette into your cassette recorder/ player, press the play button and allow to run until tape stops.

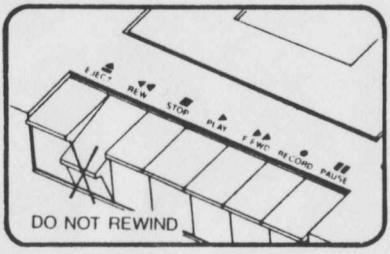
DIRECTION

1. Turn on cassette recorder/player and lower the volume.
2. Insert cassette; fully rewind from last use.
3. Run cassette recorder/player in "play" mode to the end of tape (approximately one minute).
4. Remove cassette. DO NOT REWIND. Rewinding may re-magnetize heads. (If cassette is accidentally rewound, place PINWHEEL DEMAGNETIZER in "play" mode again and re-run to the end of the tape.)









Direction for use:
Using the enclosed bottle of cleaning fluid, place approximately 3 drops of cleaning fluid on the white cleaning tape through the opening in the front of cassette. Insert the demagnetizing cassette into your recorder/ player, and depress the play-record button. Allow to run until the tape stops. If the machine is so equipped, it will reverse at the end of one pass and return to the beginning. (If no auto-reverse feature, rewind the cassette to the beginning). The spinning magnet has now removed harmful magnetic patterns from the tape head, while the tape drive shaft and tape head have been gently buffed clean. The demagnetizing cassette should be used after approximately every 20 hours of playing time (cannot harm the recorder regardless of how often it is used).

This maintenance kit is suitable for cleaning all types of reel to reel and cassette tape recorders.
Loss of sound quality is invariably due to dirty tape heads. Wow and flutter can be caused by dirty capstan and/or pinch roller. It is recommended that tape heads are cleaned at very regular intervals or before recording.

DIRECTIONS FOR USE

1. Check instruction manual for access to heads, capstan and roller. These can usually be reached more easily when the machine is in the 'play' position.
2. Apply two or three drops of tape head cleaning fluid to the cotton bud to clean the erase, recording/play back heads, then clean capstan and tape guides.
3. Apply two or three drops of fluid to the other end of the cotton bud and clean the pinch roller.
4. Be sure to replace bottle caps tightly.
5. Use cleaning brush to remove residues in the tape travel path.